

## CHAPTER 41 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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### 4100 GENERAL PROVISIONS

- 4100.1 This chapter shall identify the solid wastes which are subject to regulation as hazardous wastes under Chapters 42 through 54 and which are subject to the notification requirements.
- 4100.2 This chapter shall identify the materials which are hazardous wastes under §§8, 11 and 3(b) of HWMA, D.C. Code §§6-707, 6-710, and 6-702(2), respectively. A material which is not identified as a hazardous waste in this chapter shall be a hazardous waste if the following occurs:
- (a) In the case of §8 of HWMA, the Department has reason to believe that the material may be a hazardous waste within the meaning of §3(b) of HWMA; or
  - (b) In the case of §11 of HWMA, the statutory elements are established.
- 4100.3 A solid waste is any discarded material that is not excluded by §4100.15.
- 4100.4 A discarded material is any material which is:
- (a) Abandoned, as explained in §4100.5 of this section;
  - (b) Recycled, as explained in §4100.6 of this section; or
  - (c) Considered inherently wastelike, as explained in §4100.7.
- 4100.5 Materials are solid waste if they are abandoned by being:
- (a) Disposed of;
  - (b) Burned or incinerated; or
  - (c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.
- 4100.6 Materials are solid waste if they are recycled or accumulated, stored, or treated before recycling as specified in this section:

- (a) Spent materials, sludges (listed in §4103.5 or §4103.6), sludges exhibiting a characteristic of hazardous waste, by-products (listed in §4103.5 or §4103.6), by-products exhibiting a characteristic of hazardous waste, commercial chemical products listed in §4103.7 and scrap metal are solid wastes when they are:
    - (1) Applied to or placed on the land in a manner that constitutes disposal; or
    - (2) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste);
  - (b) Commercial chemical products listed in §4103.7 are not solid wastes if they are applied to the land and that is their ordinary manner of use;
  - (c) Spent materials, sludges (listed in §4103.5 or §4103.6), sludges exhibiting a characteristic of hazardous waste, by-products (listed in §4103.5 or §4103.6), by-products exhibiting a characteristic of hazardous waste, commercial chemical products listed in §4103.7 and scrap metal are solid wastes when they are:
    - (1) Burned to recover energy; or
    - (2) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste);
  - (d) Commercial chemical products listed in §4103.7 are not solid wastes if they are themselves fuels;
  - (e) Spent materials, sludges (listed in §4103.5 or §4103.6), by-products (listed in §4103.5 or §4103.6), and scrap metal are solid wastes if reclaimed; and
  - (f) Spent materials, sludges (listed in §4103.5 or §4103.6), sludges exhibiting a characteristic of hazardous waste, by-products (listed in §4103.5 or §4103.6), by-products exhibiting a characteristic of hazardous waste and scrap metal are solid wastes when accumulated speculatively.
- 4100.7 The following inherently waste-like materials are solid wastes when they are recycled in any manner:
- (a) Hazardous Waste Numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028;
  - (b) The Director will use the following criteria to add wastes to that list:
    - (1) The materials are ordinarily disposed of, burned, or incinerated;
    - (2) The materials contain toxic constituents listed in Appendix VIII of 40 CFR Part 261 (incorporated by reference, see Chapter 53) and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and
    - (3) The materials may pose a substantial hazard to human health and the environment when recycled.



- 4100.8 Materials are not solid wastes when they can be shown to be recycled by being:
- (a) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed;
  - (b) Used or reused as effective substitutes for commercial products; or
  - (c) Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.
- 4100.9 The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process described in §4100.8:
- (a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land;
  - (b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels;
  - (c) Materials accumulated speculatively; or
  - (d) Materials listed in §4100.7(a).
- 4100.10 Respondents in actions to enforce regulations implementing HWMA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, shall demonstrate that there is a known market or disposition for the material and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.
- 4100.11 A solid waste is a hazardous waste if:
- (a) It is not excluded from regulation as a hazardous waste under §4100.16; and
  - (b) It meets any of the following criteria:
    - (1) It exhibits any of the characteristics of hazardous waste identified in §4102;
    - (2) It is listed in §4103 and has not been excluded from the lists of §4103 or excluded by the Administrator;
    - (3) It is a mixture of a solid waste and a hazardous waste that is listed in §4103 solely because it exhibits one or more of the characteristics of hazardous waste identified in §4102, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in §4102;
    - (4) It is a mixture of solid waste and one or more hazardous wastes listed in §4103 and has not been excluded from this paragraph under §§4001.1 through 4001.5 or excluded by the Administrator; however, the following mixtures of solid wastes and hazardous wastes listed in

§4103 are not hazardous wastes (except by application of §4100.11(b)(1) or §4100.11(b)(2)) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either §307(b) or §402 of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater):

- (A) One or more of the following spent solvents listed in §4103.5 - carbon tetrachloride, tetrachloroethylene, trichloroethylene; Provided, that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed one (1) part per million;
- (B) One or more of the following spent solvents listed in §4103.5 - methylene chloride, 1,1,1-trichloroethane, chlorobenzene, ortho-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents; Provided, that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed twenty-five (25) parts per million;
- (C) One of the following wastes listed in §4103.6 - heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050);
- (D) A discarded commercial chemical product, or chemical intermediate listed in §4103.7, arising from "*de minimis*" losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, "*de minimis*" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or
- (E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in §4103; Provided, that the annualized average flow of laboratory wastewater does not exceed one percent (1%) of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories



that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

- 4100.12 A solid waste which is not excluded from regulation under §4100.11(a) becomes a hazardous waste when any of the following events occur:
- (a) In the case of a waste listed in §4103 when the waste first meets the listing description set forth in §4103;
  - (b) In the case of a mixture of solid waste and one (1) or more listed hazardous wastes, when a hazardous waste listed in §4103 is first added to the solid waste; or
  - (c) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in §4102.
- 4100.13 Until the hazardous waste meets the criteria of §4100.14:
- (a) A hazardous waste shall remain a hazardous waste;
  - (b) Except as otherwise provided in §4100.13(c), any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal);
  - (c) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one (1) or more of the characteristics of hazardous waste:
    - (1) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332); and
    - (2) Wastes from burning any of the materials exempted from regulation by §§4100.31(e) through 4100.31(k).
- 4100.14 Any solid waste described in §4001.13 is not a hazardous waste if it meets the following criteria:
- (a) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in §4102; or
  - (b) In the case of a waste which is a listed waste under §4103, contains a waste listed under §4103 or is derived from a waste listed in §4103, it also has been excluded from §4100.13 under §4001.1 and by the Administrator.
- 4100.15 For the purposes of this chapter, the following materials are not solid wastes:
- (a) Domestic sewage ("Domestic sewage" means untreated sanitary wastes that pass through a sewer system);
  - (b) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment;

- (c) Industrial wastewater discharges that are point source discharges subject to regulation under §402 of the Clean Water Act, as amended:
  - (1) This exclusion shall apply only to the actual point source discharge; and
  - (2) It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment;
- (d) Irrigation return flows;
- (e) Materials subjected to *in-situ* mining techniques which are not removed from the ground as part of the extraction process;
- (f) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in Chapter 54;
- (g) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Chapter 54; and
- (h) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process; Provided, that:
  - (1) Only tank storage is provided, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
  - (2) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
  - (3) The secondary materials are never accumulated in tanks for over twelve (12) months without being reclaimed; and
  - (4) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

4100.16 The following solid wastes are not hazardous wastes:

- (a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle, if that facility:
  - (1) Receives and burns only the following:
    - (A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and



- (B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and
- (2) That facility does not accept hazardous wastes and the owner or operator of that facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in that facility;
- (b) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:
  - (1) The growing and harvesting of agricultural crops; or
  - (2) The raising of animals, including animal manures;
- (c) Mining overburden returned to the mine site;
- (d) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels;
- (e) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy;
- (f) Wastes which fail the test for the toxicity characteristic because chromium is present or are listed in §4103 due to the presence of chromium, which do not fail the test for the toxicity characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:
  - (1) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;
  - (2) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
  - (3) The waste is typically and frequently managed in non-oxidizing environments;
- (g) Specific wastes which meet the standard in §4100.16(f) (so long as they do not fail the test for the toxicity characteristic, and do not fail the test for any other characteristic) are as follows:
  - (1) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling;
  - (2) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling;
  - (3) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish;

hair save/ chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue;

- (4) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling;
  - (5) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling;
  - (6) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue;
  - (7) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; and
  - (8) Wastewater treatment sludges from the production of  $\text{TiO}_2$  pigment using chromium-bearing ores by the chloride process;
- (h) Solid waste from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore;
- (i) Cement kiln dust waste; and
- (j) Solid waste which consists of discarded wood or wood products which fails the test for the toxicity characteristic and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

4100.17 A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste - treatment-manufacturing unit, is not subject to regulation under Chapters 42 through 54 or to the notification requirements of §3010 of RCRA until it exits the unit in which it was generated, unless the hazardous waste remains in the unit more than ninety (90) days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

4100.18 Samples shall be regulated as follows:

- (a) Except as provided in §4100.18(b), a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this section, Chapters 42 through 54, or to the notification requirements of §3010 of RCRA when:
  - (1) The sample is being transported to a laboratory for the purpose of testing;



- (2) The sample is being transported back to the sample collector after testing;
    - (3) The sample is being stored by the sample collector before transport to a laboratory for testing;
    - (4) The sample is being stored in a laboratory before testing;
    - (5) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
    - (6) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary);
  - (b) In order to qualify for the exemption in §§4100.18(a)(1) and 4100.18(a)(2), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall do the following:
    - (1) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
    - (2) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
      - (A) Assure that the following information accompanies the sample:
        - (i) The sample collector's name, mailing address, and telephone number;
        - (ii) The laboratory's name, mailing address, and telephone number;
        - (iii) The quantity of the sample;
        - (iv) The date of shipment; and
        - (v) A description of the sample;
      - (B) Package the sample so that it does not leak, spill, or vaporize from its packaging; and
  - (c) This exemption does not apply if the laboratory determines that the waste is hazardous, but the laboratory is no longer meeting any of the conditions stated in §4100.18(a).
- 4100.19 A generator is a small quantity generator if he or she generates less than one hundred kilograms (100 kgs.) of hazardous waste or less than one kilogram (1 kg.) of acutely hazardous waste in a calendar month.
- 4100.20 [Reserved]
- 4100.21 Hazardous waste that is subject to the requirements of §§4100.32 through 4100.34, §§4503, 4504, and 4506, shall be included in the quantity determinations of this section and is subject to the requirements of Chapters 42 through 46.

- 4100.22 In determining the quantity of hazardous waste he or she generates, a generator need not include the following:
- (a) Hazardous waste when it is removed from on-site accumulation;
  - (b) Hazardous waste produced by on-site treatment (including reclamation) of his or her hazardous waste, so long as the hazardous waste that is treated was counted once; or
  - (c) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.
- 4100.23 If a generator generates acutely hazardous waste in a calendar month in quantities greater than set forth in this subsection, all quantities of that acutely hazardous waste shall be subject to full regulation under Chapters 42 through 47, and the notification requirements of §3010 of RCRA:
- (a) A total of one kilogram (1 kg.) of acutely hazardous waste listed in §4103; or
  - (b) A total of fifty kilograms (50 kgs.) of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, into or on any land or water, of any acutely hazardous wastes listed in §4103.
- 4100.24 A small quantity generator may accumulate hazardous waste on-site for one hundred eighty (180) days; Provided, that the quantity of hazardous waste accumulated on-site never exceeds six hundred kilograms (600 kgs.) or one kilogram (1 kg.) of acutely hazardous waste. Accumulated wastes that exceed the time and quantity limit of this subsection shall be subject to §4202.6.
- 4100.25 A small quantity generator may either treat or dispose of his or her hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which, if located in the United States is:
- (a) Permitted by the District under Chapter 46;
  - (b) In interim status under Chapters 44 and 46;
  - (c) Authorized to manage hazardous waste by a State with a hazardous waste management program approved by EPA; or
  - (d) A facility which:
    - (1) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
    - (2) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation.
- 4100.26 Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous wastes identified in §4102.
- 4100.27 If a small quantity generator mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.



- 4100.28 If a small quantity generator's wastes are mixed with used oil, the mixture shall be subject to §4504 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also regulated if it is destined to be burned for energy recovery.
- 4100.29 Hazardous wastes that are recycled are not subject to the requirements for generators, transporters, and storage facilities of §§4100.32, 4100.33, and 4100.34, except for the materials listed in §§4100.30 and 4100.31 of this section. Hazardous wastes that are recycled will be known as "recyclable materials."
- 4100.30 The following recyclable materials are not subject to the requirements of this section, but are regulated under §§4502 through 4506 and all applicable provisions in Chapters 46 and 47:
- (a) Recyclable materials used in a manner constituting disposal (§4502);
  - (b) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under (§4503);
  - (c) Used oil that exhibits one (1) or more of the characteristics of hazardous waste and is burned for energy recovery in boilers and industrial furnaces that are not regulated under (§4504);
  - (d) Recyclable materials from which precious metals are reclaimed (§4505); and
  - (e) Spent lead-acid batteries that are being reclaimed (§4506).
- 4100.31 The following recyclable materials are not subject to regulations under Chapters 42 through 54, and are not subject to the notification requirements of §3010 of RCRA:
- (a) Industrial ethyl alcohol that is reclaimed:
    - (1) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in §4204, export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in §4204, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export; and
    - (2) Transporters transporting a shipment for export shall not accept a shipment if he or she knows the shipment does not conform to the EPA Acknowledgement of Consent, must ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment and shall ensure that it is delivered to the facility designated by the person initiating the shipment;
  - (b) Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;
  - (c) Used oil that exhibits one (1) or more of the characteristics of hazardous waste, but is recycled in some other manner than being burned for energy recovery;
  - (d) Scrap metal;

- (e) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;
  - (f) Oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;
  - (g) Coke and coal tar from the iron and steel industry that contains EPA hazardous waste number K087 (decanter tank tar sludge from coking operations) from the iron and steel production process;
  - (h) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under §4504.5 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;
  - (i) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under §4504.5;
  - (j) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under §4504.5; and
  - (k) Petroleum coke produced from petroleum refinery hazardous wastes containing oil at the same facility at which such wastes were generated, unless the resulting coke product exceeds one (1) or more of the characteristics of hazardous waste in §4102.
- 4100.32 Generators and transporters of recyclable materials are subject to the applicable requirements of Chapters 42 and 43 and the notification requirements of §3010 of RCRA, except as provided in §§4100.29 through 4100.31.
- 4100.33 Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of §§4400 through 4410, and 4420, and Chapters 45, 46 and 47 and the notification requirements of §3010 of RCRA, except as provided in §§4100.29 through 4100.31 (The recycling process itself is exempt from regulation.).
- 4100.34 Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in §§4100.29 through 4100.31:
- (a) Notification requirements of §3010 of RCRA; and
  - (b) Sections 4404.4 through 4404.8 (dealing with the use of the manifest and manifest discrepancies) of this chapter.
- 4100.35 Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in §4100.37, is not subject to regulation under Chapters 41 through 54.



- 4100.36 Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in §4100.37 is subject to regulation under Chapters 41 through 54.
- 4100.37 A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in §4103, is empty if:
- (a) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating;
  - (b) No more than two and five tenths (2.5) centimeters (one inch) of the residue remain on the bottom of the container or inner liner;
  - (c) No more than three percent (3%) by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to one hundred ten (110) gallons in size; or
  - (d) No more than three tenths of a percent (0.3%) by weight of the total capacity of the container remains in the container or inner liner if the container is greater than one hundred ten (110) gallons in size.
- 4100.38 A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric pressure.
- 4100.39 A container or an inner liner removed from a container that has held an acute hazardous waste listed in §4103 shall be empty if the following occurs:
- (a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
  - (b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or
  - (c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

**AUTHORITY:** Unless otherwise noted, the authority for this chapter is §6 of the District of Columbia Hazardous Waste Management Act of 1977, as amended, D.C. Law 2-64, D.C. Code §6-701 *et seq.* (1995 Repl. Vol.), Mayor's Order 78-185 dated September 19, 1978.

**SOURCE:** Final Rulemaking published at 43 DCR 1077 (March 1, 1996), incorporating by reference the text of Chapters 40 through 54.

#### 4101 **CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTE**

- 4101.1 The Director shall identify and define a characteristic of hazardous waste in §4102 only upon determining that:
- (a) A solid waste that exhibits the characteristic may do the following:

- (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
    - (2) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and
  - (b) The characteristic can be:
    - (1) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or
    - (2) Reasonably detected by generators of solid waste through their knowledge of their waste.
- 4101.2 The Director shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:
- (a) It exhibits any of the characteristics of hazardous waste identified in §4102;
  - (b) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than fifty (50) milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than two (2) milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than two hundred (200) milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria shall be designated Acute Hazardous Waste.); or
  - (c) It contains any of the toxic constituents listed in Appendix VIII of 40 CFR §261 (incorporated by reference, see Chapter 53) unless, after considering any of the following factors, the Director concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:
    - (1) The nature of the toxicity presented by the constituent;
    - (2) The concentration of the constituent in the waste;
    - (3) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in §4101.2(c)(7);
    - (4) The persistence of the constituent or any toxic degradation product of the constituent;
    - (5) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation;
    - (6) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;



- (7) The plausible types of improper management to which the waste could be subjected;
- (8) The quantities of the waste generated at individual generation sites or on a regional or national basis;
- (9) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent;
- (10) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent; and
- (11) Any other factors as may be appropriate.

4101.3 Wastes listed in accordance with the criteria under §4101.2(c) shall be designated Toxic wastes.

4101.4 The Director may list classes or types of solid waste as hazardous waste if he or she has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in §3(b) of HWMA (D.C. Code §6-702(2)).

4101.5 The Director shall use the criteria for listing specified in this section to establish the exclusion limits referred to in §4100.21.

SOURCE: Final Rulemaking published at 43 DCR 1077 (March 1, 1996), incorporating by reference the text of Chapters 40 through 54.

## 4102 CHARACTERISTICS OF HAZARDOUS WASTE

4102.1 A solid waste which is not excluded from regulation as a hazardous waste under §4100.16, is a hazardous waste if it exhibits any of the characteristics identified in this section.

4102.2 A hazardous waste which is identified by a characteristic, but is not listed as a hazardous waste in §4103, is assigned the EPA Hazardous Waste Number set forth in the respective characteristic in this section. This number shall be used in complying with the notification requirements of §3010 of RCRA and certain recordkeeping and reporting requirements under Chapters 42 through 53.

4102.3 For purposes of this section, the Director shall consider a sample obtained using any of the applicable sampling methods specified in Appendix I of 40 CFR Part 261 (incorporated by reference, see Chapter 53) to be a representative sample within the meaning of Chapter 40. Since Appendix I of 40 CFR Part 261 sampling methods are not being formally adopted by the Director, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of his or her method under the procedures set forth in §§4001.1 through 4001.9;

4102.4 A solid waste shall exhibit the characteristic of ignitability if a representative sample of the waste has any of the following properties:

- (a) It is a liquid, other than an aqueous solution containing less than twenty-four percent (24%) alcohol by volume and has flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the

test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see Chapter 53), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see Chapter 53), or as determined by an equivalent test method approved by the Administrator under procedures set forth in §§4001.1 through 4001.9;

- (b) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard;
  - (c) It is an ignitable compressed gas as defined in 49 CFR §173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Administrator under §§4001.1 through 4001.9; or
  - (d) It is an oxidizer as defined in 49 CFR §173.151.
- 4102.5 A solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in §4103, has the EPA Hazardous Waste Number of D001.
- 4102.6 A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:
- (a) It is aqueous and has a pH less than or equal to two (2) or greater than or equal to twelve and five tenths (12.5), as determined by a pH meter using either an EPA test method or an equivalent test method approved by EPA under the procedures set forth in §§4001.1 through 4001.9. The EPA test method for pH is specified as Method 5.2 in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods* (incorporated by reference, see Chapter 53); or
  - (b) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods* (incorporated by reference, see Chapter 53) or an equivalent test method approved by EPA under the procedures set forth in §§4001.1 through 4001.9.
- 4102.7 A solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in §4103, has the EPA Hazardous Waste Number of D002.
- 4102.8 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:
- (a) It is normally unstable and readily undergoes violent change without detonating;
  - (b) It reacts violently with water;
  - (c) It forms potentially explosive mixtures with water;
  - (d) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;



- (e) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between two (2) and twelve and five tenths (12.5), can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;
  - (f) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
  - (g) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or
  - (h) It is a forbidden explosive as defined in 49 CFR §173.51, or a Class A explosive as defined in 49 CFR §173.53 or a Class B explosive as defined in 49 CFR §173.88.
- 4102.9 A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in §4103, has the EPA Hazardous Waste Number of D003.
- 4102.10 A solid waste exhibits the characteristic of EP toxicity if, using the test methods described in Appendix II of 40 CFR Part 261 or equivalent methods approved by the EPA under the procedures set forth in §§4001.1 through 4001.9, the extract from a representative sample of the waste contains any of the contaminants listed in Table I at a concentration equal to or greater than the respective value given in that Table. Where the waste contains less than five tenths percent (0.5%) filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.
- 4102.11 A solid waste that exhibits the characteristic of EP toxicity, but is not listed as a hazardous waste in §4103, has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

**TABLE I**  
**MAXIMUM CONCENTRATION OF CONTAMINANTS**  
**FOR CHARACTERISTIC OF EP TOXICITY**

<b>EPA Hazardous Waste Number</b>	<b>Contaminant</b>	<b>Maximum Concentration (milligrams per liter)</b>
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0

## 4102.11 Table I (Continued)

EPA Hazardous Waste Number	Contaminant	Maximum Concentration (milligrams per liter)
D012	Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene	0.02
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane, gamma isomer	0.4
D014	Methoxychlor (1,1,1-Trichloro-2,2-bis [p-methoxy-phenyl]ethane)	10.0
D015	Toxaphene (C <sub>10</sub> H <sub>10</sub> Cl <sub>8</sub> , Technical chlorinated camphene, 67-69 percent chlorine)	0.5
D016	2,4-D, (2,4-Dichloro-phenoxyacetic acid)	10.0
D017	2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	1.0

4102.12 Except for those solid wastes which exhibit the characteristics of corrosivity, EP toxicity, reactivity or ignitability as identified in §4102, or those wastes listed in §4103, wastes that are infectious are not subject to regulation under Chapters 40 through 54 of this subtitle.

SOURCE: Final Rulemaking published at 43 DCR 1077 (March 1, 1996), incorporating by reference the text of Chapters 40 through 54.

### 4103 LISTS OF HAZARDOUS WASTE

4103.1 A solid waste is a hazardous waste if it is listed in §4103 unless it has been excluded from this list under §§4001.1 through 4001.5, and 4001.10.

4103.2 The Director shall indicate his or her basis for listing the classes or types of wastes listed in this subsection by employing one (1) or more of the following Hazard Codes:



## 4103.2 (Continued)

Classes or Types of Waste	Hazard Codes
Ignitable Waste . . . . .	(I)
Corrosive Waste . . . . .	(C)
Reactive Waste . . . . .	(R)
EP Toxic Waste . . . . .	(E)
Acute Hazardous Waste . . . . .	(H)
Toxic Waste . . . . .	(T)

Appendix VII of 40 CFR Part 261, as amended, identifies the constituent which caused the Director to list the waste as an EP Toxic Waste (E) or Toxic Waste (T) in §§4103.5 and 4103.6.

- 4103.3 Each hazardous waste listed in §4103 is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number shall be used in complying with the notification requirements of §3010 of RCRA and certain recordkeeping and reporting requirements under Chapters 42 through 44, and 46.
- 4103.4 The following hazardous wastes listed in §4103.5 or §4103.6 are subject to the exclusion limits for acutely hazardous wastes established in §§4100.19 through 4100.28: EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027.
- 4103.5 Table II lists the hazardous wastes from non-specific sources unless they are excluded under §§4001.1 through 4001.5, and 4001.10:

TABLE II

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
GENERIC:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent (10%) or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)

4103.5 (Continued)

TABLE II (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
F002	The following spent halogenated solvents: tetra-chloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends, containing before use, a total of ten percent (10%) or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixture/blends containing, before use, one or more of the above non-halogenated solvents, and a total of ten percent (10%) or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent non-halogenated solvents; cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent (10%) or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent (10%) or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)



4103.5 (Continued)

TABLE II (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R,T)
F010	Quenching bath residue from oil baths from metal heat treating operations where cyanides are used in the process.	(R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R,T)
F012	Quenching wastewater treatment sludges from metal treating operations where cyanides are used in the process.	(T)
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one (1) to five (5), utilizing free radical catalyzed processes. [This listing does not include light ends, spent filters and filter aids, spent desiccants, wastewater, wastewater treatment sludges, spent catalyst, and wastes listed in §4103.6.]	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)

## 4103.5 (Continued)

TABLE II (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)
*(I,T) should be used to specify mixtures containing ignitable and toxic constituents.		

4103.6 Table III lists hazardous wastes from specific sources unless they are excluded under §§4001.1 through 4001.5, and 4001.10.

TABLE III

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>WOOD PRESERVATION:</b>		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)



4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>INORGANIC PIGMENTS:</b>		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)
<b>ORGANIC CHEMICALS:</b>		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R,T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R,T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)

4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
ORGANIC CHEMICALS: (Continued)		
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoro-methanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from orthoxylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from orthoxylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methy ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R,T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	(T)



4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>ORGANIC CHEMICALS:</b> (Continued)		
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K111	Product washwaters from production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)

4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>ORGANIC CHEMICALS:</b> (Continued)		
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
<b>INORGANIC CHEMICALS:</b>		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
<b>PESTICIDES:</b>		
K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)



4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
PESTICIDES: (Continued)		
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C,T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production of ethylenebisdithiocarbamic acid and its salts.	(T)

4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>EXPLOSIVES:</b>		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
<b>PETROLEUM REFINING:</b>		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
<b>IRON AND STEEL:</b>		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC codes 331 and 332).	(C,T)
<b>SECONDARY LEAD:</b>		
K069	Emission control dust/sludge from secondary lead smelting.	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)



## 4103.6 (Continued)

TABLE III (Continued)

Industry & EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
<b>VETERINARY PHARMACEUTICALS:</b>		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
<b>INK FORMULATION:</b>		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
<b>COKING:</b>		
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)

4103.7 The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in §4100.4(a); when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment; when they are otherwise applied to the land in lieu of their original intended use; when they are contained in products that are applied to the land in lieu of their original intended use; or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel or burned as a fuel:

- (a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in §§4103.7(e) and 4103.7(f);
- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in §4103.7(e) or 4103.7(f);
- (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in §4103.7(e), unless

the container is empty as defined in §4100.39. Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Department considers the residue to be intended for discard, and thus, a hazardous waste (*An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.*);

- (d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in §4103.7(e) or 4103.7(f), or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in §4103.7(e) or 4103.7(f):
  - (1) The phrase “commercial chemical product or manufacturing chemical intermediate having the generic name listed in. . .” refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in §4103.7(e) or 4103.7(f); and
  - (2) Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in §4103.7(e) or 4103.7(f), such waste shall be listed in either §4103.5 or 4103.6 or shall be identified as a hazardous waste by the characteristics set forth in §4102;
- (e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in §§4103.7(a) through 4103.7(d) are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in §4100.23:
  - (1) The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity; and
  - (2) An underlined EPA Hazardous Waste Number (EPA HW NO) means that the Chemical Abstract (CAS) Number given is for parent compound only. These wastes and their corresponding EPA Hazardous Waste Numbers are as follows:



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-08	Acrolein
P070	116-06-3	Aldicarb
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-),bis(cyano-C)-,potassium
P010	7778-39-4	Arsenic acid $H_3AsO_4$
P012	1327-53-3	Arsenic oxide $As_2O_3$
P011	1303-28-2	Arsenic oxide $As_2O_5$
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine,2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)
P046	122-09-8	Benzeneethanamine, alpha, alpha-dimethyl-
P014	108-98-5	Benzenethiol
<u>P001</u>	81-81-2	2H-1 Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl]oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $\text{Ca}(\text{CN})_2$
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(O-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide $\text{Cu}(\text{CN})$
P030	-----	Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DEP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5, 8,8a-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro-, (1alpha, 4alpha, 4abeta, 5beta, 8beta, 8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7 a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)-
<u>P051</u>	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7, 7a-octahydro-, (1aalpha, 2beta, 2abeta, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)-
P044	60-51-5	Dimethoate
P046	122-09-8	alpha, alpha-Dimethylphenethylamine
<u>P047</u>	534-52-1	4,6-Dinitro-o-cresol, and salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramidate, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P039	298-04-4	Disulfoton
P049	541-53-7	2,4-Dithiobiuret
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[methylamino)carbonyl]-,methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-2-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P092	62-38-4	Mercury, (acetato-O)phenyl-



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methamine, N-methyl-N-nitroso
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7, 8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro 3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyl lactonitrile
P071	298-00-0	Methyl parathion
P072	86-88-4	alpha Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>
<u>P075</u>	54-11-5	Nicotine, and salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO <sub>2</sub>

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO <sub>4</sub> (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
<u>P047</u>	534-52-1	Phenol, 2-methyl-4,6-dinitro-, and salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6 dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl]ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O- pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl]O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid O,O-dimethyl O-(4-nitrophenyl)ester
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate- (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
<u>P075</u>	54-11-5	Pyridine, 3-(1-methyl- 2-pyrrolidinyl)-,-(S)- and salts
P114	12039-52-0	Selenious acid, dithallium (1+)salt
P103	630-10-4	Selenourea

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P107	1314-96-1	Strontium sulfide
P107	1314-96-1	Strontium sulfide SrS
<u>P108</u>	57-24-9	Strychnidin-10-one, and salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
<u>P108</u>	57-24-9	Strychnine, and salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethylpyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide $Tl_2O_3$
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, Tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide $V_2O_5$
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-Nitroso
<u>P001</u>	81-81-2	Warfarin, and salts when present at concentrations greater than 0.3%
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide $Zn_3P_2$ when present at concentrations greater than 10% (R,T)

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in §§4103.7(a) through 4103.7(d), are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity provisions defined in §§4100.19 and 4100.25:

- (1) The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity; and
- (2) An underlined EPA Hazardous Waste Number (EPA HW NO) means that the Chemical Abstract (CAS) Number given is for the parent compound only. These wastes and their corresponding EPA Hazardous Waste Numbers are as follows:

EPA HW No.	CAS No.	Substance
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
<u>U240</u>	94-75-7	Acetic Acid, (2,4-dichlorophenoxy)-,salts and esters
U112	141-78-6	Acetic acid, ethyl ester (I)
U144	301-04-2	Acetic acid, lead (2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-75-6	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic Acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino(2',3':3,4)pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[aminocarbonyl)oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(aalpha,8beta,8aalpha,8b-alpha)]-
U157	50-49-5	Benz[j]aceanthrylene,1,2-dihydro-3-methyl-
U016	225-51-4	3,4-Benz[c]acridine
U017	98-87-3	Benzal chloride

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U192	23950-58-5	Benzamide,3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	1,2-Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine,4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)- alpha-hydroxy, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, di-n-octyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis [4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl-(I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-83-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
<u>U202</u>	81-07-2	1,2-Benzisothiazol-3-(2H)-one, 1,1-dioxide, and salts
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene
<u>U248</u>	81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U160	1338-23-4	2-Butanone peroxide (R,T)
U053	270-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy- 2-(1-methoxyethyl)-3-methyl-1- oxobutoxy] methyl]-2,3,5,7a-tetrahydro-1H- pyrrolizin-1-yl ester, [1alpha(Z), 7(2S*,3R*),7aalpha]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U097	79-4-7	Carbamic chloride, dimethyl-
<u>U114</u>	111-54-6	Carbamodithioic acid, 1,2-ethanediybis-,salts and esters
U062	2303-16-4	Carbamodithioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2- propenyl)ester
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbon difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester(I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha and gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt
U050	218-01-9	Chrysene
U051	-----	Creosote
U052	1319-77-3	Cresols (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(alpha, 2alpha,3beta,4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
<u>U240</u>	94-75-7	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-2-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-1	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethylenedioxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyldithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydro- peroxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2- Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U077	107-06-02	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis (oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis- (I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
<u>U114</u>	111-54-6	Ethylenebisdithiocarbamic acid, salts and esters
U067	106-93-4	Ethylene dibromide

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	72-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose,2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(-methylnitrosoamino)- carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R, T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H <sub>2</sub> S
U096	80-15-9	Hydroperoxide, 1- methyl-1-phenylethyl-(R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U139	9004-66-4	Iron dextran
U190	85-44-9	1,3 Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I,T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7 Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydizo
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methylchlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK)(I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10- [(3-amino-2,3,6-trideoxy)-alpha-L-lyxo- hexopyranosyl)oxy]- 7,8,9,10-tetrahydro-6,8,11- trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	2-Naphthylamine, N,N'-bis(2-chloromethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium (1+)salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	15-18-0	2H-1,3,2-Oxazaphosphorine, 2-amine,N,N-bis(2-chloroethyl)tetrahydro-,2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-94-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt(2:3)
U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl S-methyl-, ester

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U189	1314-80-3	Phosphorous sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propane, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-2	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
<u>U202</u>	81-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS <sub>2</sub> (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex(2,4,5-TP)
U206	18883-64-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)



## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> tetramethyl-
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane

## 4103.7 (Continued)

EPA HW No.	CAS No.	Substance
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
<u>U248</u>	81-81-2	Warfarin & salts when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide $Zn_3P_2$ , when present at concentrations of 10% or less.

SOURCE: Final Rulemaking published at 43 DCR 1077 (March 1, 1996), incorporating by reference the text of Chapters 40 through 54.